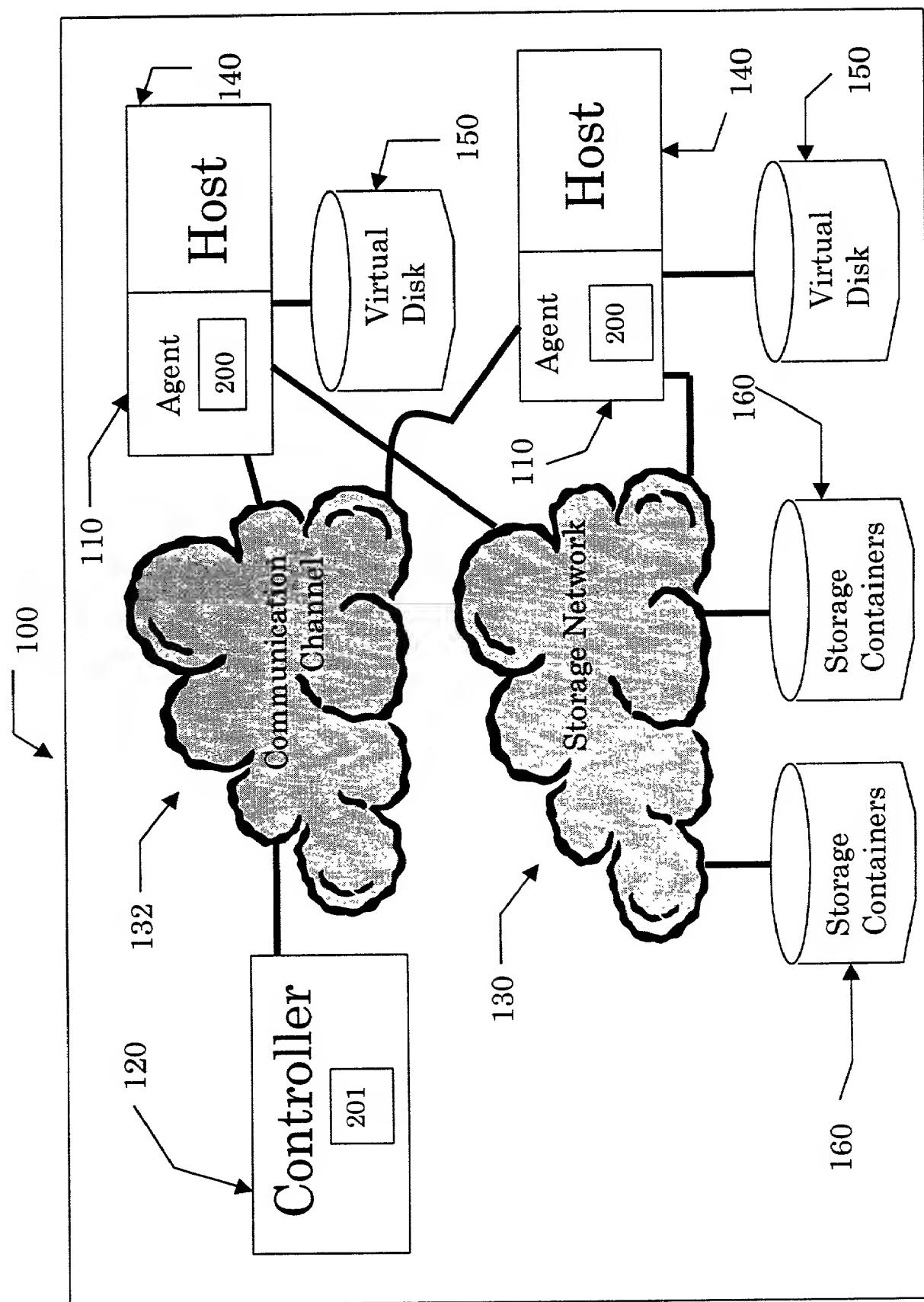


Figure 1A



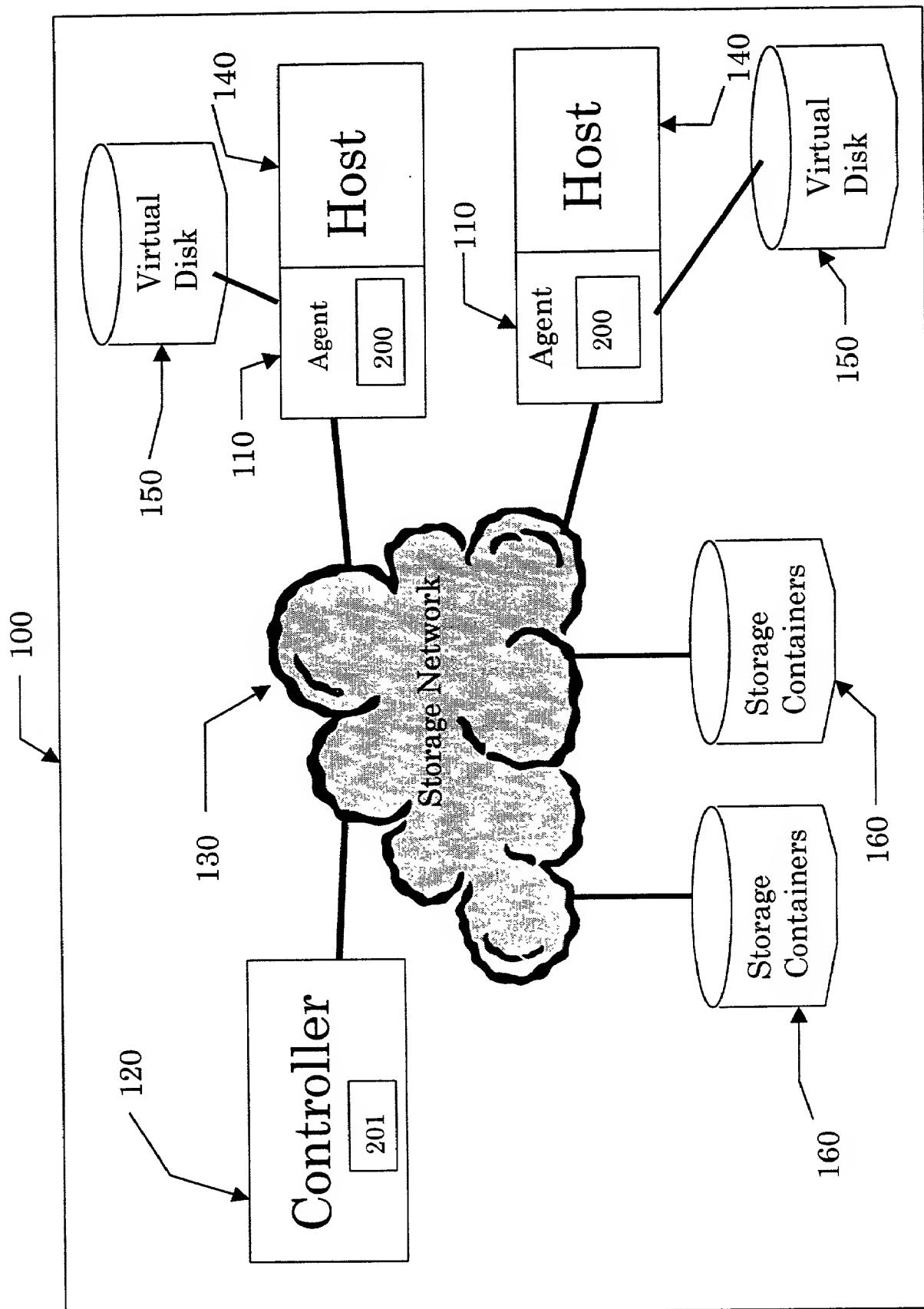


Figure 1B

Virtual Disk Block(2) 220	Storage Location 230	Alternate Storage Location 235	Invalid	Nw	Z	Error	Alternate Exists?	Bitmap 225
	LUN	Block(s)	LUN	Block(2)				
210→	232	234	236	238				
1-10	1	1-10	2	11-20	no	no	no	3,8,9
11-20	2	1-10	2	21-30	no	yes	no	
210→	21-20	1	11-20	1	21-30	no	no	no
210→								

210→  
210→  
210→

↑  
201

Figure 2A

Figure 2B

The diagram illustrates two tables, Table 203 and Table 206, each enclosed in a rectangular border. Arrows point from the bottom right corner of each table to its corresponding page number below it.

Virtual Disk Block(2) 220	LUN	Storage Location 230	Block(s)	Invalid 240	Nw 250	Z 260	Error 270	Alternate Exists? 255	Alternate Table 215
210→ 1-10		232	234						
210→ 11-20	1	1-10		no	no	no	yes		1
210→ 21-20	2	1-10		no	yes	no	no	no	
	1	11-20		no	no	no	no	no	

↑  
203

Alternate Table #1 (215)			
Virtual Disk Block(2) 220	LUN	Alternate Storage Location 235	Bitmap 225
	236	238	
1-10	2	11-20	3,8,9
11-20	2	21-30	
21-20	1	21-30	

↑  
206

201

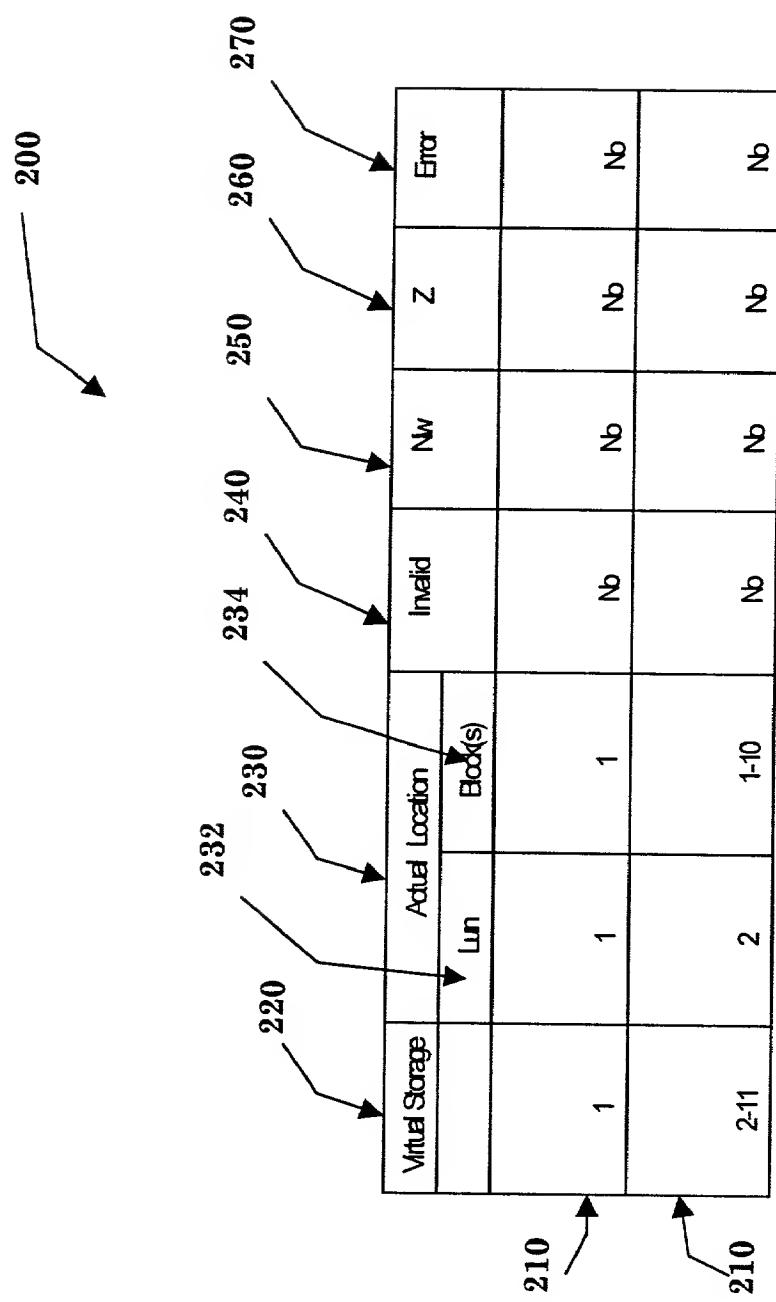
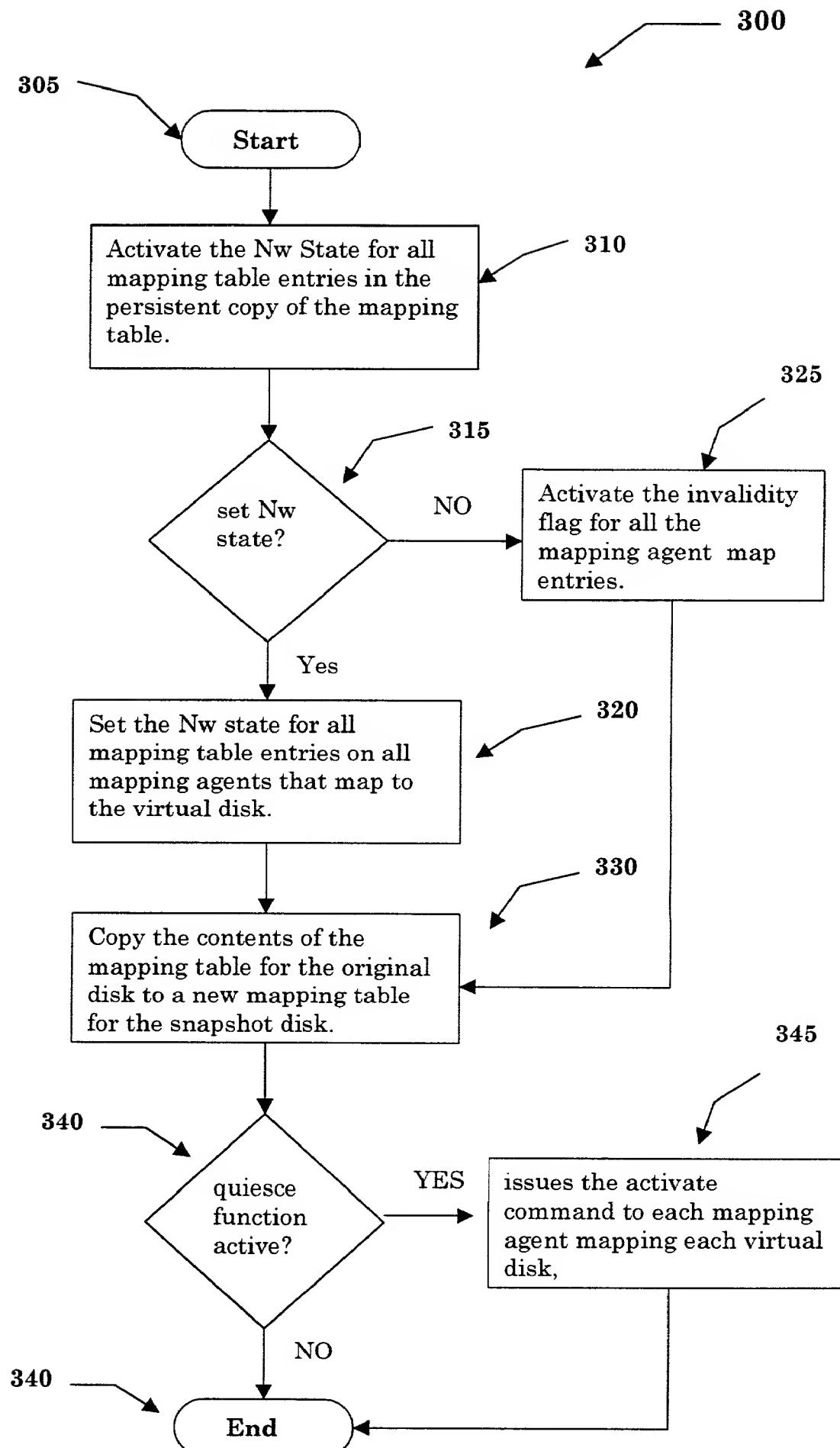
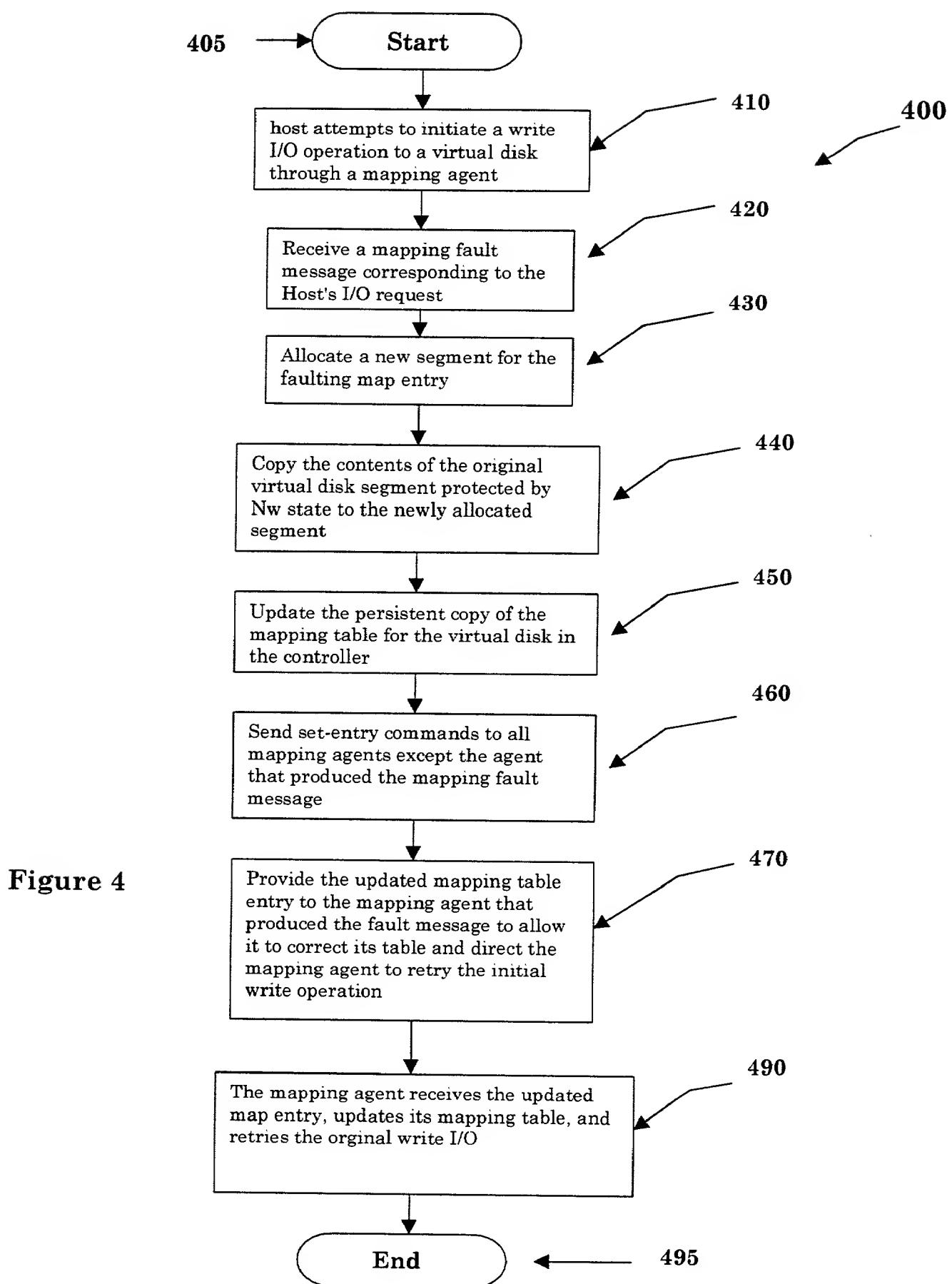
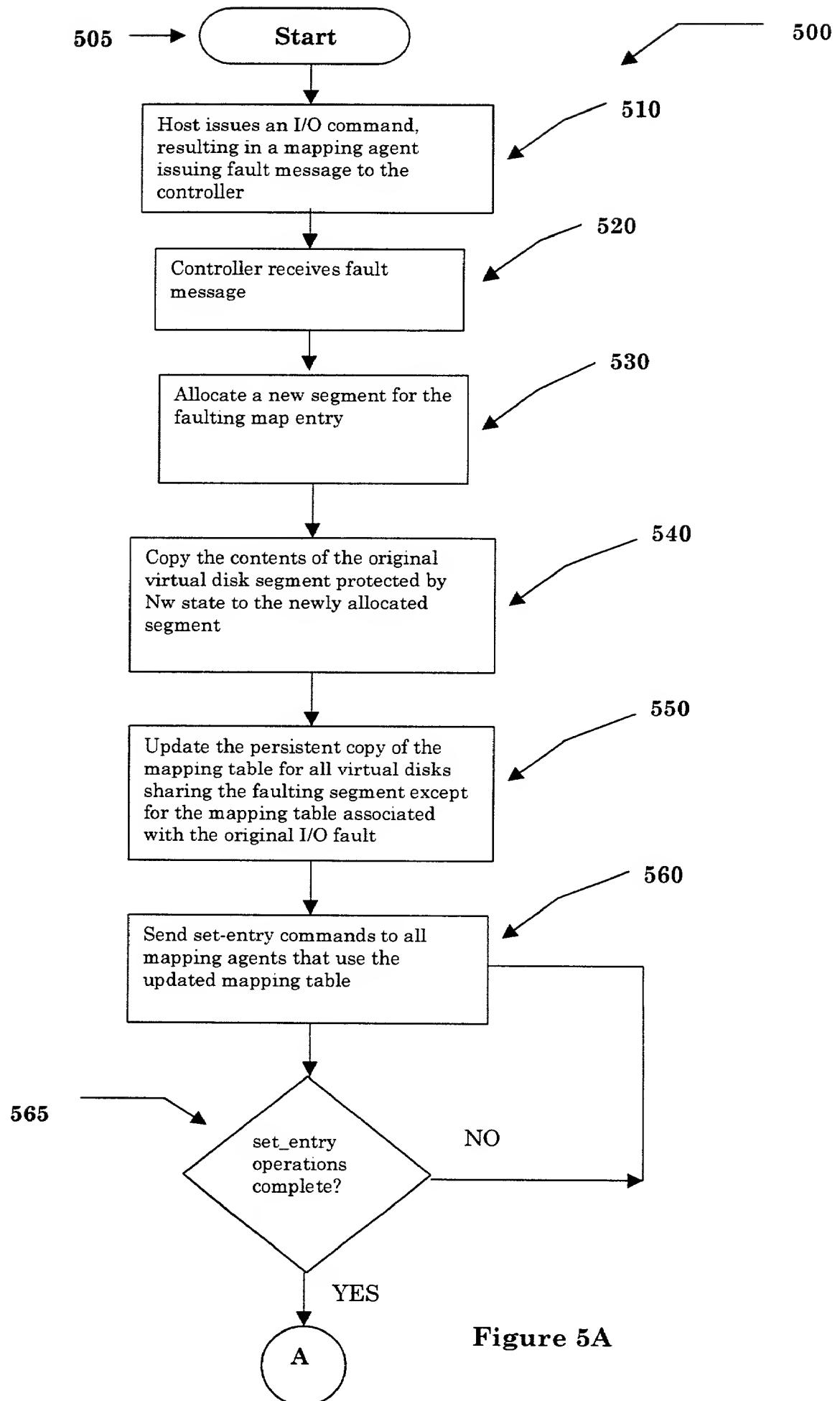


Figure 2C



**Figure 3**





**Figure 5A**

500 continued

A

Update the controller's persistent copy of the mapping table for the virtual disk associated with the faulting map agent

570

Send set\_entry commands to all mapping agents mapping to the virtual disk to correct their mapping tables to match the tables stored in the controller

575

Instruct the mapping agent responsible for the I/O fault to update its mapping table to be consistent with the mapping table stored in the controller

580

Send a replacement mapping table to the mapping agent responsible for the I/O fault message

585

Update the mapping table entry in the mapping agent responsible for the I/O fault message

590

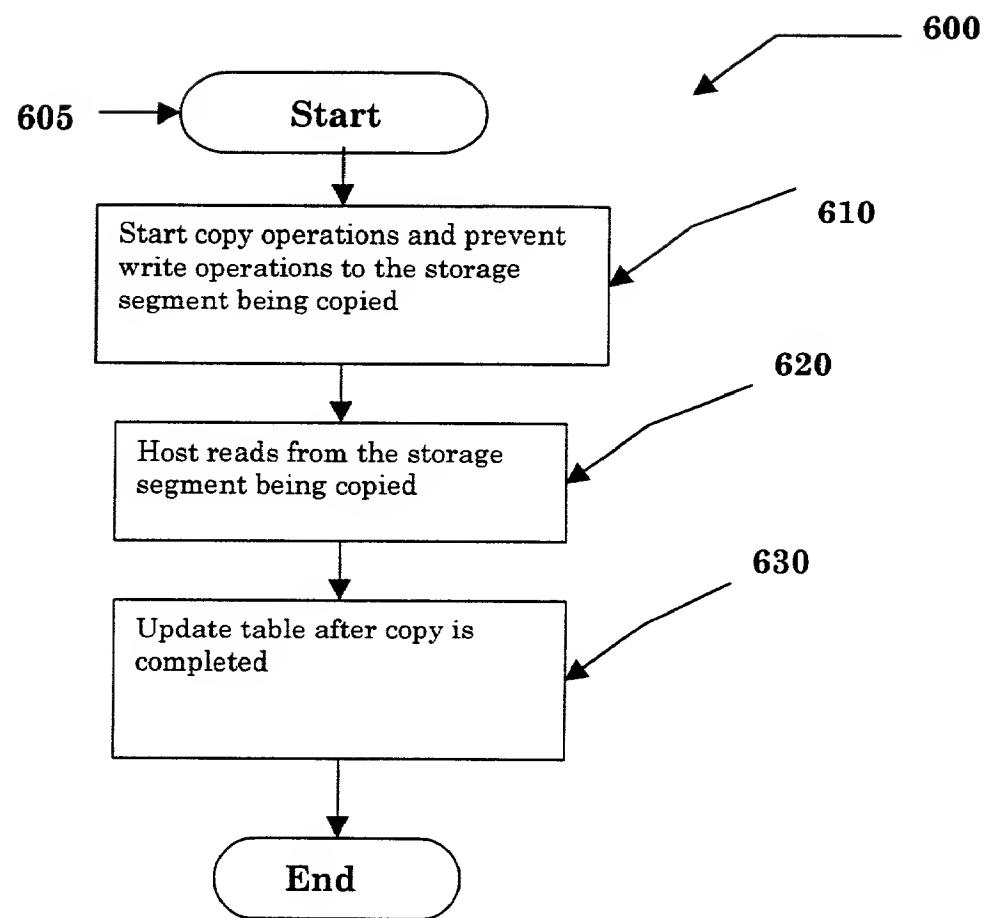
Reattempt the original write I/O request

595

End

← 597

Figure 5B



**Figure 6A**

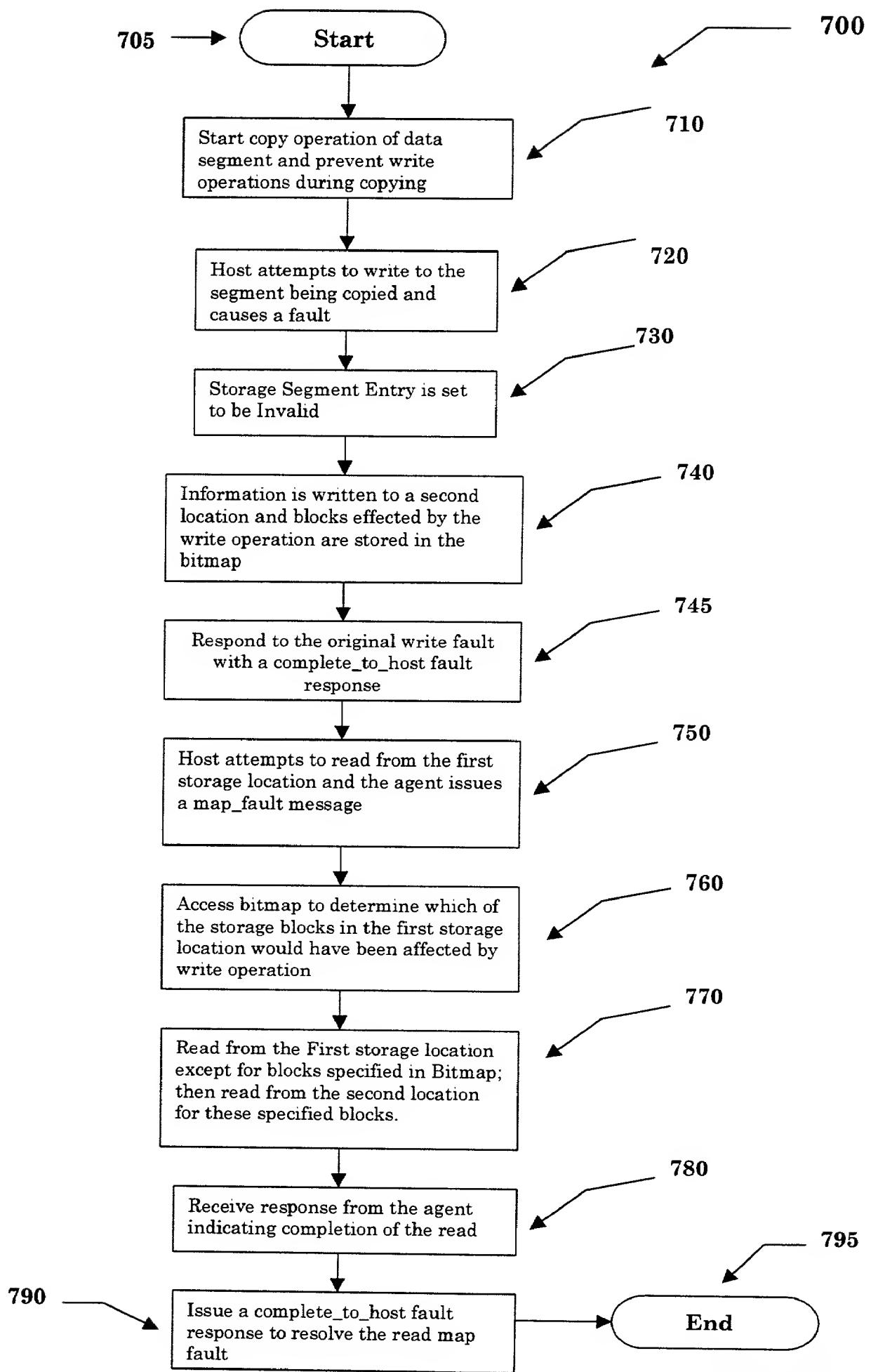


Figure 6B